

INTERNATIONAL SEARCH REPORT

International Application No

PCT/JP2004/018081

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 F02D41/02 F02D41/14

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
 IPC 7 F02D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2002/116919 A1 (ROSEL GERD ET AL) 29 August 2002 (2002-08-29) paragraphs '0007!, '0025!, '0028! - '0033! claims 6-9	1, 4, 6, 8, 9
Y	WO 02/18034 A (VOLKSWAGEN AKTIENGESELLSCHAFT; POTT, EKKEHARD; ZILLMER, MICHAEL; LINDL) 7 March 2002 (2002-03-07) abstract; figure 2 page 2, paragraph 3 - page 3, paragraph 2	2, 3, 5, 7
X	WO 02/18034 A (VOLKSWAGEN AKTIENGESELLSCHAFT; POTT, EKKEHARD; ZILLMER, MICHAEL; LINDL) 7 March 2002 (2002-03-07) abstract; figure 2 page 2, paragraph 3 - page 3, paragraph 2	1-4
Y	US 4 454 846 A (SUZUKI ET AL) 19 June 1984 (1984-06-19) abstract	2, 3
		-/-

 Further documents are listed in the continuation of box C. Patent family members are listed in annex.

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Date of the actual completion of the international search

Date of mailing of the international search report

10 March 2005

17/03/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax (+31-70) 340-3016

Authorized officer

Röttger, K

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5 784 880 A (TOSHIRO ET AL) 28 July 1998 (1998-07-28) column 1, line 36 - line 48 -----	5
Y	PATENT ABSTRACTS OF JAPAN vol. 010, no. 265 (M-515), 10 September 1986 (1986-09-10) & JP 61 087935 A (TOYOTA MOTOR CORP), 6 May 1986 (1986-05-06) abstract -----	7

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/JP2004/018081

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
US 2002116919	A1	29-08-2002	DE FR	10109331 C1 2821390 A1		13-06-2002 30-08-2002
WO 0218034	A	07-03-2002	DE DE WO EP	10043098 A1 50101458 D1 0218034 A1 1320409 A1		11-07-2002 11-03-2004 07-03-2002 25-06-2003
US 4454846	A	19-06-1984	JP JP JP	1908622 C 6029589 B 59173533 A		24-02-1995 20-04-1994 01-10-1984
US 5784880	A	28-07-1998	JP DE	9042020 A 19630944 A1		10-02-1997 06-02-1997
JP 61087935	A	06-05-1986	NONE			